DOCUMENT RESUME

ED 209 865 EC 140 381

AUTHOR Magin, Kevin D.
TITLE Movement Based Language: The Van Dijk Model.
PUB DATE May 79
NOTE 10p.; Paper presented at the Regional Workshop of the Southeast Regional Center for Deaf-Blind Children (Nashville, TN, May 6-9, 1979).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Development; Communication (Thought Transfer); *Deaf Blind; *Developmental Stages; *Language Acquisition; *Parent Child Relationship; Psychomotor Skills

ABSTRACT

The paper examines the development of language in the deaf blind child with emphasis on the child's motoric behavior and imitation as the initial step in language acquisition. Discussed are the following early developmental stages: symbionic (the close physical and emotional identification of child with the mother to be or new mother); resonance (in which the child responds physically to stimulation); and nonrepresentational reference (in which the child learns to identify important objects such as parts of his body). Coactive movement (in which the child and adult explore the child's environment together) should lead to imitation of motoric action and conceptualization. The use of natural gestures by the adult to reinforce communication efforts should lead to use of an arbitrary language system including speech, fingerspelling, reading, and writing. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED209865

MOVEMENT BASED LANGUAGE:

THE VAN DIJK MODEL

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

KEVIN D. MAGIN, M. Ed.
Coordinating Teacher
Deaf-Blind Department
Washington State School for the Blind
Vancouver, Washington

Presented at the Southeast Regional Center
for Deaf-Blind Children

Regional Workshop

Nashville, Tennessee

May 6-9, 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
John W. Crosby
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC140381

One of the most pressing concerns encountered in the education of the deaf-blind child is the acquisition of language, for it is through language that the child becomes a participating member of society. The ability to express one's own desires, needs and concerns is what enables one to successfully interact with his environment and to make positive changes in it. Language is the tool that allows the child to pass outside of himself and enter into the world of others—the greater world of society itself. For a pre-linguistic child the world exists within his own body and has not expanded outward. Language allows the child to bridge the distance between himself, others and his environment and to make known to others his feelings.

Language, therefore, must come from within the child, for meaningful language is the child's attempts to communicate with the outside world. Since arbitrary language systems such as sign language, finger spelling, reading, writing and speech are formalized systems that are generated by society and not the child, we must begin looking at language development at the levels which precede these arbitrary systems.

The key to the initial stage of language acquisition in the deaf-blind child is that of motoric behavior. It is through the child's motoric actions that we are able to realize his initial attempts to bridge the gap to meaningful language.

With language as a child-centered, child-generated process which is expressed through the child's motoric actions, it is extremely important that the child have a well developed understanding of his own body and self. Only when the child realizes that not only do "I HAVE A BODY" but "I AM A BODY" can the child learn what that body can do. Early on, the child's self view is singular. Things happen in relationship to him as an individual. Early concepts and interactions are based on child-centered ideas. Concepts such as "up-down, in-out, front-back, stand-sit" and many more are body oriented and can only be conveyed and built upon by the child if he has an understanding of himself. When the child is aware of his own body as a single unit and of the relationships of the parts of that body to each other and to the whole, only then is he ready to explore the world outside his body. We cannot put a child to work outside his body before he knows that he is a body and exists as an individual. With knowledge, motoric imitation becomes possible and it is motoric imitation that provides the first major key to the development of a meaningful language system.

Early Development Stages

Too often we have passed through the pre-linguistic stages without the child developing a proper body schema. Frequently, the child is assessed or treated as being at a higher level of development than he really is. We must determine where the child really is and return to that level and work with the child there rather than where we would like him to be. With language coming from within the child, we must know and work at this level.

The earliest and most basic stages we must look at in the development of the child are called Symbionic Relationship and Resonance Phonomenon. It is often in these early developmental levels that the beginnings of many of the problems encountered later may be seen.

Symbionic relationship refers to a closeness, a oneness that is shared by a mother-to-be and her child or a new mother and her baby. The two share physical, emotional, biological and psychological ties that can never be duplicated. Prior to birth, the child and mother act and respond as one; if the mother is excited, the child becomes excited; if the mother's blood pressure goes up, so does the child's; if the mother becomes ill, so does the child.

After birth, the mother and child retain much of the emotional and psychological ties. The child knows no distance from the mother. Interaction is still on a 'oneness' level.

It is through physical, mental and emotional shock to the mother and child during the symbionic relationship period that the child often acquires a sensory deprivation that is difficult to overcome. The blindness, deafness and other associated handicaps interfere with the normal bonding process between the two. Such a child is deprived of much of the contact, stimulation and interaction common to the non-handicapped child. Stereotypic behaviors often develop as a result of deprivation. The senses of hearing and vision are often distorted through filtering, flapping and eye gouging to bring stimulation to the child.

We cannot go back and repeat this relationship with an older deaf-blind child. We can look at this relationship and look at the child as he has developed and attempt to assist him in developing in the areas that may have suffered through deprivation at this time. We can repeat the close one-to-one activities such as rocking, holding and singing from this stage and attempt to instill in the child a better understanding of self that may have been lacking. We can attempt to correct or compensate for the stereotypic behaviors developed. By establishing a close tie with the child, we can build a trusting relationship with him to use as a basis for interaction during the later functioning levels.

As time and distance come between the child and mother, we move from the symbionic relationship stage to a stage called Resonance Phenomenon. In the non-handicapped child this occurs from shortly after birth through the early developmental months. The relationships existing at this level are emotional and non-cognitive. Stimulation reacts on the child and the child responds to this stimulation in a physical manner.

Resonance is a stage to pass through in normal development. It is here we must deal with the child before attempting higher functioning tasks. However, many lower functioning deaf-blind children do not pass through this stage but rather remain here.

During resonance phenomenon, the organism can be reached and stimulated and we can exert control over the child through various forms of stimulation. We can learn how much the child can accept and control input. "Conversation" exists at this time in that you stimulate, the child acts, and you react. However, action-reaction only serves to satisfy the immediate needs of the child and no permanent change is seen.

In normal development the pathways and upper layers of the cortex develop through the early months following birth and continue to grow through the early years. The pathological factors in the deaf-blind child stop or retard the growth of cells before a mature stage is reached. By stimulating the child at the resonance level we may influence a change or a growth in the neurological process. Early intervention (ages 0-5) becomes extremely important in attempting to overcome a lack of normal cell growth and enable the child to continue to develop. In older children, when the neurological system has already matured, our aim must be to alter the existing behaviors of the child to produce desired results.

The educational implication for the resonance level child are varied. It is extremely important to follow the child's needs very carefully. The objective of educational intervention is to make the child more responsive to stimulation as a method of adding additional responses to his repertoire. We must bring the child in balance with himself. Stimulation must be used to restore calm when the child is upset. The child must be in a receptive state before any additional input will cause change.

To produce change requires a consistency of approach, repetition of exact behaviors and extremely small increments of new material. Only when we have consistency can we have change. Change may be accomplished but only over long periods and with much difficulty. The person looking for immediate gratification should never expect it with this level child.

As the child shows a responsiveness to various stimuli, he will develop an awareness of and eventually an anticipation for the stimuli. The child will remember the previous situation and react in a way to that stimulus that will produce a desired continuation of the stimulus.

The first steps toward adding new responses are taken by the child. The child gives the clues and you respond. Listen to the child, react to the child and bring your own professional and personal expertise into play in determining when and where the child wants to go.

There are some children, however, whose physical and neurological development are such that they will never leave the sensory, touching level. There is always something that can be done to enable balance with the organism even at this level. Even though there is little possibility of carry-over, we can still stimulate and otherwise interact with the child to provide for his immediate gratification and general internal harmony.

Motoric Language

The normal development of meaningful language begins with motoric actions and progresses toward the use of an arbitrary language system. Let us now look at the avenues and paths for the progression from simple motoric action to meaningful language.

The initial stage for the development, refinement and expansion of motoric actions is Co-Active Movement. This stage is an exploring together with the child of his environment and his relationships with it. You must let the child dictate the items, the time and the place for exploring. You cannot force the child to explore. You must begin with the child where he is and go where he wishes to go. Interaction with the child must be a total body experience for both the child and the teacher. You must give 100% of yourself during co-active movement.

The child must be interested—if he has no need to explore he will not do so. You must again use your personal and professional expertise to structure the child's environment so the child will want to explore, will want to be curious, will need a reason to do things. You must create a need for the child and then follow him as he seeks ways to satisfy that need so as to insure the child is profiting from his exploration and interaction with the environment he explores.

The deaf-blind child is so engrossed with the near senses or a near use of distant senses that he does not develop the needs to explore. Exploring is a complex process of coming in contact with the environment or an item, looking at it and all its components, and forming concepts based on what is observed. Exploring is much more than touching. Self-stimulation such as filtering, twirling, eye gouging and others prohibit the child from reaching out further into his world. You must structure the child's immediate environment to provide for him to explore and you must be there to explore with him.

As the child co-actively moves through his environment with you, he develops an awareness of competence. He knows that he can do things for

himself. He realizes that he is the center of action. This provides for the beginning of the development of an ego, of a personal body schema. Before this the child is an extension of someone else. Now he becomes an entity unto himself.

To provide the child with experiences and interaction with the environment we will suggest the stage called Non-Representational Reference. This stage is a part of the normal development of the non-handicapped child and must not be left out or overlooked with the deaf-blind child. Non-representational reference means that the real object is referred to the child and not a symbol, sign or gesture. In the non-representational reference stage the child is referred to items—"these are your arms, these are my arms, these are the doll's arms." This is not a matching but giving the child a point of reference that exists in his world. Non-representational reference serves an important role in assisting the child in developing a more highly defined body schema and a more complex basis for language.

Additionally, the child should be encouraged to develop "objects of reference." These singular items carry with them references to a total happening or event. A straw may represent a party, a doll represent mother or an airplane a trip home. The items do not become signs for the events but merely items that refer to the emotionally important aspects of the situations.

Through the use of co-active movement, the child must reach the stage of imitation. At this level separation from the immediately presented model becomes possible. For the child to imitate a motoric action he must be able to: perceive, store, recall and act. He must be able to transfer from a visual or tactual modality to a motoric modality. For this he must have a memory. This memory must be trained and developed in the deaf-blind child. In addition to short and long term memories, the child must learn sequential memory—for language is not just words and their meanings but also the order and sequence of these words. The sequential memory must be supported by all possible senses.

Imitation of motoric action will shift to development of conceptualization because the essential aspects of a concept are its motoric elements and the emotions it generates. The first concepts of objects for the child enter through the sensory-motor aspect as experienced by the child. Concepts for each individual are built around different aspects of the item as the individual experienced the object previously. Each time the child experiences an object he gains more insight into its conceptual meaning for him.

What can be done with the item sensorially and motorically is what the child remembers. When the child manipulates an item we do not know what concept he is forming. Concepts have both a cognitive or action end and a conative or emotional end. Because the child experiences the world in a different way than we do, his sensory-motoric concepts are different from ours.

We must adapt initially to his concepts and must not insist on the use of standardized or formal signs, signals, words or actions. The child's concept exists in his sensory-motor context. He will exhibit these signals to us through his motor behavior.

Moving with the child co-actively through his environment provides us with the opportunities to make changes in that child's patterns and to introduce new patterns for the child to learn.

As the child establishes a norm pattern we are able to expand that norm to include more complex and additional norms by introduction of small changes to the child's pattern during co-active movement. We can structure the changes to lead the child to an acceptable norm or norm more closely akin to what others see for that particular action or item.

The child establishes a norm; we introduce a norm close to the child's norm; then introduce another norm slightly more different, and so on, to shape the child's learning process. When we have moved the child from his originally established norm to another more widely accepted norm, we have succeeded in teaching the child. In teaching, we follow a pattern close to the child's norm level to produce a lasting new impression on the child.

You are able to accomplish change in the child's behavior and learning because through your previous co-active movements you have developed an expectation in the child. The child anticipates the next reaction and when a change occurs, the child recognizes the change and reacts to it. The teaching process then takes on a pattern as follows:

Anticipation by child	Change by you	Recognition of Change by child	Reaction by child	Response by you

Natural Gestures

At this point the child has "spoken" to you. He has indicated through his reaction that he desired something to happen which he expected but which did not occur. Whatever signal the child uses to show his reaction is a motoric gestural symbol. If the child continued rocking his body when you stopped rocking, then he has established rocking his body as a motoric symbol for rocking which you must accept as his word for rocking. The child will have provided you insight into his language system through his natural gesture or natural symbol. You must feed this symbol back to the child to transmit your understanding to him that you have received his message and that he has made a positive change in you and his world through his gesture.

The term natural gesture or symbol refers to an action which is motorically similar to the thing it represents. "Arms swinging for swing; hands up for pick me up; hand to mouth for eat"— all are natural gestures children use to signal an action or event. Natural gestures play an extremely important part in the development of language in any child, handicapped or not. They play an even greater role for the deaf-blind child.

The motoric actions of the child will lead us to natural gestures which he depicts as his concepts of an item or action. For a child, things have meaning only when they do something or something is done with them. A ball becomes a ball when it is thrown, rolled or bounded; a cookie becomes a cookie when it is eaten; a tricycle a tricycle when it is ridden. Things are things of action. The first ideas the child has of things in his world are based on his motoric interaction with these items and these concepts are shown to us through the child's use of motoric patterns representing his internalized concept of the action or item. True conceptualization exists when the signal has similarity to how the child motorically experienced the object. Each child produces his own language system and this system must be fed back to him. The child must realize that he can represent things as he experienced them and that these representations have meaning to others. If we provide the signals rather than accepting the child's words we may be building a vocabulary of codes without the child grasping the conceptualization and we will not have a child with language but rather a child with a nearly useless vocabulary of isolated words.

It is through these natural gestures, then, that we can begin to build a more formalized language system. As the child acquires more natural gestures and makes these known to us, two very important things must occur in their use. The child must "de-naturalize" and "de-contextualize" the gestures.

De-naturalization refers to moving the gesture away from a total motoric resemblance to a finer motoric action that still resembles the concept. A motoric refinement of the action is necessary to allow for a progression to the finer motor action in formalized, arbitrary language systems.

De-contextualization occurs when the gesture is made out of the context in which it was learned or is made in anticipation of the event it represents rather than at or during the event. The gesture takes on a degree of autonomy and is no longer tied to a particular place or situation. The child has taken a symbol and removed it from specific visual, verbal or tactual clues and reproduced it not only as a motoric action but as a representation of a concept not immediately present. To do this the child must rely on his memory of past experiences with the situation or object.

The teaching-learning process calls for us to provide the child with more and different situations to use his gestures and to enable him to grow. The child must de-naturalize and de-contextualize himself but we must structure his surroundings to allow for this development.

Arbitrary Language Systems

Once the child has attained 40-50 motoric concept gestures, he will be moving into another higher stage of development. At this point the formalized, arbitrary language system can be introduced. Arbitrary language systems include speech, sign, finger spelling, reading and writing.

Which arbitrary language system to use with a particular child must be based on a variety of factors including the child's previously learned patterns, demonstrated potential and teacher/parent/therapist assessment of the total learning environment. Your personal and professional expertise comes into play in this determination.

Whatever arbitrary language system is chosen needs to be supplemented with conversation building techniques and other methods worked out between the child and teacher. The child must develop a system of language and not a system of isolated words.

To teach the child a new word (concept) you must first bring him into a situation where he would talk if he could talk (talk is used here to refer to any arbitrary language system). Arouse the child's curiosity and he will use body language, utterances, or gestures to convey his desires. You then are able to speak for him. "You want _____?" You may then visualize the conversation through drawings, pictures, models or dolls and represent to the child a picture of himself speaking. This process of drawing out conversations is called Ideo-visual Reading and is a very valuable tool in conversation building.

When the child is able to carry on a conversation and to use an arbitrary language system then he has attained meaningful language. When the child can represent things not present and make his desires and wants known to others in a manner they understand, then he has entered into the world of society.

Summary

In summary, we see that it is from the child that meaningful language generates. It is through a need to communicate—one that is implanted and structured by us—that the child expresses his desires. It is in the motoric action of the child that we are able to see his conceptualization of things and to learn what the child has to teach us—his natural gestural language system. Only at the point that we can speak the child's language can we effectively re-structure that gestural language and teach the child to use our formalized arbitrary language systems. Meaningful language exists when the child can express his own desires, needs and concerns to us in a way that we understand. That should be the goal of all pre-language and language development. The methodology described here will hopefully prove helpful in attaining these goals.